

Author Index

Canadian Journal of Soil Science, Volume 92, 2012

- Abedin, J., 253
 Ai, Y., 277
 Akinremi, O.O., 609, 631
 Andr  n, O., 821
 Angers, D.A., 19
 Archibald, H.A., 7
 Arocena, J.M., 243
 Asadi, H., 665
 Ashworth, J., 901
- Baert, G., 787
 Bai, Z., 509
 Baker, J.L., 493
 Ball, K., 39
 Bao, K., 463
 Beasley, B.W., 673, 865
 Beckett, P., 203, 253
 Bedard-Haughn, A.K., 649
 Ben Hassine, H., 367
 Ben Slimane, D., 367
 Benke, M.B., 589
 Bens, O., 53
 Benslim, H., 751
 Bernier, M., 733
 Biswas, A., 649
 Blackshaw, R.E., 841
 Bock, M.D., 7
 Boldt, K., 67
 Bolinder, M.A., 821
 Bomke, A.A., 191
 Bremer, E., 673
 Brierley, J.A., 7
 Brocke, L., 39
 Broersma, K., 685, 89
 Buckley, K.E., 711
 Bullecer, I., 901
 Bulmer, C., 165
 Burras, C.L., 383, 403
 Burton, D.L., 695, 795
- Campbell, C.A., 449, 481, 573
 Carrere-Hern  ndez, J.J., 103
 Chanasyk, D.S., 7, 89, 117
 Chang, S.X., 213
 Chantigny, M.H., 711
 Chary, G.R., 771
 Chau, H.W., 649
 Chen, X., 463, 529, 559, 567
 Chen, Y., 429, 509, 537, 807
 Chen, Z., 277
 Chow, P.S., 143
- Chymko, N., 39
 Coburn, C.A., 297
 Coote, D.R., 471
 Craig, J.R., 723
 Cruse, R.M., 381, 383, 529, 567
 Cutforth, H., 803
- Da, Z., 277
 Daigh, A., 529
 De Jong, R., 481, 573
 DeMaere, P.R., 883
 Demers, I., 711
 Desjardins, R.L., 573
 Dessureault-Rompr  , J., 695
 Devito, K.J., 103
 Dinwoodie, G., 39
 Dowbenko, R., 759
 Drozdowski, B.L., 77
 Drury, C.F., 285, 481, 673, 695, 835, 865
 Dumon, M., 787
 Dunfield, K.E., 599
 Duran, A., 383
 Dyer, R., 39
- Eneji, A.E., 893
 Etmanski, A., 39
 Evans, C.R.W., 685
- Fan, R., 463
 Faridullah, 893
 Faz Cano, A., 243
 Fenton, T.E., 413
 Flaten, D.N., 609
 Forge, T.A., 711
 Fritsch, S., 67
 Furon, A., 315
- Gagnon, B., 341, 711, 917
 Gardner, W.C., 89
 Geert Baert, 905
 Georgallas, A., 695
 Goh, T.B., 589
 Goyer, C., 759
 Grant, B., 449
 Grant, C., 341, 695
 Green, M., 471
 Guo, P., 277
- Han, X., 439, 501
 Han, X.Z., 419
- Hao, X., 589, 631, 841
 Hargreaves, J., 203
 Hassan, A., 893
 He, C., 845
 He, H., 509, 835
 Helmers, M.J., 493
 Herbert, S.J., 501, 521
 Holmes, E.P., 191, 229
 Howat, D., 39
 Huffman, T., 381, 383, 471, 481
 H  ttl, R.F., 67
- Indraratne, S.P., 841
 Irshad, M., 893
 Iverson, M.A., 191
- Jain, M.P., 771
 Janz, A., 39
 Jia, S., 463
 Jiang, H., 439
 Jiang, X., 559
 Jiao, X.-g., 551
 Jin, J., 543
 Jobson, A.M., 89
 Judiesch, D., 803
- Kane, E.S., 799
 Kanyankogote, P., 787, 905
 Karamanos, R., 589
 Kariyapperuma, K.A., 315
 Kasischke, E.S., 799
 Kasongo, R.K., 787, 905
 K  tterer, T., 821
 Kravchenko, Y., 429
 Kravchenko, Y.S., 383
 Kr  bel, R., 573
 Kr  mmelbein, J., 53
 Krzic, M., 685
 Kundu, S., 771
- Lafond, G.P., 449
 Lal, R., 771
 Landh  usser, S.M., 143
 Lanteigne, L., 203
 Larney, F.J., 19, 673, 711, 883
 Lauzon, J.D., 285, 353
 Lavkulich, L.M., 229
 Leatherdale, J., 117
 Lemke, D.W., 493
 Lemke, R., 573
 Lemke, R.L., 449

- Leskiw, L.A., 179, 269, 7
 Li, H.B., 419
 Li, W., 277
 Li, X.H., 419
 Li, Y., 807, 845
 Liang, A., 463
 Liang, Y., 419, 645
 Liao, Z., 845
 Lilles, E.B., 213
 Liu, H., 277
 Liu, J., 543
 Liu, S., 845
 Liu, X., 383, 521, 537, 543
 Liu, X.B., 381
 Liu, X.-b., 551
 Lobb, D.A., 609
 Lock, A., 203
 López-Gutiérrez, J.C., 329
 Luo, Y., 807
 Lupwayi, N.Z., 589

 Macdonald, S.E., 213
 MacKenzie, M.D., 131, 143
 Manukyan, R., 665
 Massicotte, H.B., 329
 McConkey, B.G., 449
 McConkey, T., 165
 Melvin, S.W., 493
 Mendoza, C.A., 103
 Mi, L., 543
 Miller, J.J., 673, 865
 Morras, H., 383

 Naderi, H., 665
 Naeth, M.A., 1, 53, 7, 77, 89
 Nazmi, L., 665
 Nemirsky, C.L., 7
 Nolin, M.C., 733

 O'Reilly, K.A., 353
 Olatuyi, S.O., 609, 631
 Olsen, A.F., 883

 Parent, L.-É., 711
 Parent, L.E., 821
 Parkin, G.W., 285
 Patterson, B., 39
 Pervez, A., 893
 Petrendo, L., 429
 Petrone, R.M., 103
 Pinno, B.D., 143
 Posadowski, T., 203
 Powter, C., 39
 Price, J.S., 723

 Puhlamnn, R., 39
 Purdy, B.G., 213

 Quenum, M., 733
 Quideau, S., 117
 Quideau, S.A., 131, 143, 153

 Raab, T., 53
 Ramnarine, R., 599
 Ren, J., 509
 Ren, X., 297
 Reynolds, W.D., 285, 835
 Rezanezhad, F., 723
 Richens, T., 39
 Robertson, S.J., 329
 Rogovska, N., 429
 Rutherford, P.M., 329

 Saleem, A., 893
 Sanborn, P., 165
 Saso, J.K., 285
 Sayari, C., 367
 Schneider, B.U., 67
 Schreier, H., 229
 Sedor, R.B., 179
 Sharma, R.A., 771
 Sharma, S.K., 771
 Shi, C., 559
 Shi, X., 463
 Si, B., 381, 439
 Si, B.C., 649
 Singh, A.K., 771
 Sinton, H., 39
 Smerdon, B.D., 103
 Snowdon, E., 759
 Soenens, M., 203
 Song, C., 419, 429, 537
 Song, F., 501
 Spagnoli, G., 859
 Spiers, G., 203, 253
 Srinivasarao, C., 771
 Steppuhn, H., 573
 Studdert, G., 383
 Sui, Y., 521, 543
 Sui, Y.-y., 551

 Teillet, P.M., 297
 Thompson, D.J., 685
 Tisch, B., 203
 Tremblay, N., 645
 Turcotte, I., 153

 Van Eerd, L.L., 353
 Van Mourik, J.M., 243

 Van Ranst, E., 787, 905
 Vanasse, A., 751
 VandenBygaart, A.J., 7, 449
 Veenstra, J.J., 403
 Venkateswarlu, B., 771
 Verdoodt, A., 787, 905
 Veverica, T.J., 799
 Vittal, K.P.R., 771
 Voroney, R.P., 599
 Vyn, R.J., 353

 Wagner-Riddle, C., 315, 599
 Wang, E., 529, 559, 567
 Wang, G., 543
 Wang, L., 509
 Wang, S., 807
 Wang, Z., 297
 Watson, D., 39
 Welsh, C.M., 179, 269
 Whalen, J.K., 751
 Wilkinson, S.R., 77
 Wilson, J., 229

 Xia, X., 559
 Xia, Y., 521
 Xie, H., 509

 Yan, J., 419
 Yan, Y., 509
 Yang, J.Y., 481
 Yang, X., 463, 835
 Yang, X.M., 481
 Yuan, X., 383

 Zebarth, B.J., 673, 695, 759, 865
 Zeleke, T.B., 179, 269
 Zeng, L., 277
 Zentner, R.P., 573
 Zhang, B., 835
 Zhang, X., 383, 429, 463, 509, 521, 537, 835
 Zhang, X.-y., 551
 Zhao, X., 807
 Zhao, Y., 567
 Zhou, K., 521
 Zhou, X., 493
 Zhu, J., 645
 Zhu, P., 509
 Zhu, X., 501
 Ziadi, N., 341, 711, 917
 Zou, W., 439

Subject Index

Canadian Journal of Soil Science, Volume 92, 2012

- Acid soil
 - extractants to assess metal phytoavailability, 253
- Acidic and calcareous soils
 - forms of compost phosphorus, 711
- Actinorhiza
 - biochar enhances seedling growth, 329
- Adventitious roots
 - organic layer depth in forests, 799
- Aggregate-associated carbon
 - fertilizer treatments on water-stable aggregates, 551
- Aggregate size distribution
 - cattle manure on soil aggregate size and nutrients, 673
 - moisture and freeze/thaw on aggregate size, 529
- Aggregate stability
 - long-term grazing effects on soil properties, 685
 - moisture and freeze/thaw on aggregate size, 529
- Agriculture
 - agriculture's effects on the classification of Black soils, 403
- Agrominéraux
 - influence des agrominéraux sur la production du soja, 905
- Alnus viridis* ssp. *sinuata*
 - biochar enhances seedling growth, 329
- Amelioration
 - reclamation of lignite mining areas, 53
- Amendment, soil
 - diamond mine reclamation in the Canadian north, 77
 - subsoiling and pellet injection on soil quality, 269
- Ammonium
 - retention and nitrification of injected ammonia, 589
- Amylase
 - screening bioassay for soil PHC toxicity, 901
- Anthroposolic Order, 7
- Arénosols
 - roches vertes de Gangila comme amendement des sols sableux, 787
- Argillic horizon
 - freeze-thaw and soil erosion in northeast China, 567
- Asbestos
 - reclamation of asbestos, 229
- Bacterial community
 - microbial biogeographic distribution in Black soils, 543
- Bandes spectrales
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Bioassay, field
 - soybean insecticides and earthworm toxicity, 751
- Bioavailability
 - P availability from treated poultry litter, 893
- Biofuel
 - bioenergy crop production on tailings, 203
- Biogeography
 - microbial biogeographic distribution in Black soils, 543
- Biomass
 - microbial, chemical and biological properties in a Chinese Mollisol, 419
 - reclamation of copper mine tailings, 89
 - root, long-term grazing effects on soil properties, 685
- Biosolids
 - bioenergy crop production on tailings, 203
 - papermill biosolids and alkaline residuals, 917
 - reclamation of copper mine tailings, 89
- Black carbon
 - biochar enhances seedling growth, 329
- Black soil (see Mollisol)
- Black spruce
 - organic layer depth in forests, 799
- Boreal forest
 - aspen and white spruce growth on saline soils, 213
 - phenolic profiles in natural and reconstructed soils, 153
- trembling aspen growth on reclamation soils, 143
- British Standard
 - comparison of methods to calculate liquid limit for clay, 859
- Bromide
 - measurement of nitrate movement using bromide and ^{15}N , 631
 - vertical and lateral transport of bromide, 609
- Brownfield
 - soil inventory for brownfield reclamation, 191
- Bt* corn
 - soil nutrient, C and N isotope levels, 841
- Bulk density
 - long-term grazing effects on soil properties, 685
 - reclamation of oil and gas well sites, 165
- Calamagrostis epigeios*
 - influence of root growth on soil development, 67
- Calcite caps
 - reclamation of mine water deposits, 243
- Canadian agricultural nitrogen budget
 - changes of residual soil N in Chernozems, 481
- Canola, transgenic
 - soil nutrient, C and N isotope levels, 841
- Canonical correlation
 - tillage erosion and crop yield, 665
- Capacité de rétention en eau
 - roches vertes de Gangila comme amendement des sols sableux, 787
- Capacité maximale de sorption du phosphore
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Carbon
 - biochar enhances seedling growth, 329

- contributions of carbonates to soil
 - CO₂ emissions, 599
- forty-nine years of fertilization on soil carbon, 835
- grazing exclusion effects on C sequestration, 807
- long-term grazing effects on soil properties, 685
- Carbon dioxide emission
 - contributions of carbonates to soil CO₂ emissions, 599
- Carbon inputs, critical
 - agronomic productivity and quality of a vertisol, 771
- Carbon, microbial biomass
 - chemical and biological properties in a Chinese Mollisol, 419
- Carbon, organic
 - fertilization effects on C and N, 509
 - forty-nine years of fertilization on soil carbon, 835
 - influence of root growth on soil development, 67
 - natural gas wellsite reclamation, 883
- Carbon sequestration
 - long-term agronomic effects on soil C, 449
 - modelling SOC dynamics in forage-based crop rotations, 821
- Cartographie numérique des sols
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Casagrande cup
 - comparison of methods to calculate liquid limit for clay, 859
- Catch crops
 - N and corn profits with fall cover crops, 353
- Charge négative variable
 - roches vertes de Gangila comme amendement des sols sableux, 787
- Chernozem (see Mollisol)
- Chinese Mollisol
 - fertilization effects on C and N, 509
- Chlorophyll
 - chlorophyll assessment in crop species, 645
- Classification
 - agriculture's effects on the classification of Black soils, 403
- anthroposolic order, 7
- overview of Mollisols in the world, 383
- Clay
 - comparison of methods to calculate liquid limit for clay, 859
- Climate, cool temperate
 - modelling SOC dynamics in forage-based crop rotations, 821
- Climate warming
 - climate trends in southwestern Saskatchewan, 803
- Coal
 - Alberta conservation and reclamation regulatory history, 39
 - reclamation of lignite mining areas, 53
- Compaction
 - reclamation of oil and gas well sites, 165
 - response of N mineralization and denitrification to water, 695
 - subsoiling and pellet injection on soil quality, 269
- Compost
 - composted manure lowers denitrification N loss, 865;
 - forms of compost phosphorus, 711
 - non-growing season N₂O fluxes, 315
- Conductivité électrique des sols
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Cone penetrometer
 - comparison of methods to calculate liquid limit for clay, 859
- Conservation
 - Alberta conservation and reclamation regulatory history, 39
- Contaminated soils
 - extractants to assess metal phytoavailability, 253
- Controlling factors
 - soil water in the Prairie Pothole Region, 649
- Corn
 - nitrate-N loss from corn production systems, 493
 - papermill biosolids and alkaline residuals, 917
 - soil nutrient, C and N isotope levels, 841
 - tillage and rotation effects on crop yield, 463
 - urea fertilizers in grain corn, 341
- Corn yield
 - root growth in eroded Mollisols, 521
- Correlation
 - comparison of soil water estimation methods, 845
- Cover, soil
 - soil cover changes on the Canadian prairies, 471
- Crop residue
 - agronomic productivity and quality of a vertisol, 771
- Crop rotation
 - soil nutrient, C and N isotope levels, 841
- Crop yield
 - tillage erosion and crop yield, 665
- Cropping frequency
 - long-term agronomic effects on soil C, 449
- Cropping systems
 - nitrate-N loss from corn production systems, 493
- Culture
 - effet de la pluviométrie sur les réserves hydriques des sols, 367
- Cut-slope
 - cut slope revegetation, 277
- Cyclodextrin
 - screening bioassay for soil PHC toxicity, 901
- Degradation, soil
 - soil cover changes on the Canadian prairies, 471
- Denaturing gradient gel electrophoresis
 - microbial biogeographic distribution in Black soils, 543
- Denitrification
 - composted manure lowers denitrification N loss, 865
- Dersertification
 - grazing exclusion effects on C sequestration, 807
- Diamond mine
 - diamond mine reclamation in the Canadian north, 77
- DIN
 - comparison of methods to calculate liquid limit for clay, 859
- Distribution
 - vertical and lateral transport of bromide, 609

- Diversity, species
 - soil and vegetation recovery after a well blowout, 179
- Drainage, subsurface
 - nitrate-N loss from corn production systems, 493
- Drought stress
 - water stress and rhizosphere functions in corn, 501
- Dye tracers
 - macropore flow in Black soils, 559
- Earthworm
 - soybean insecticides and earthworm toxicity, 751
- Economics
 - N and corn profits with fall cover crops, 353
- Ectomycorrhizas
 - biochar enhances seedling growth, 329
- Effet chaulant
 - influence des agrominéraux sur la production du soja, 905
- Electrophoresis, denaturing gradient gel
 - microbial biogeographic distribution in Black soils, 543
- Environmental effects
 - reclamation of asbestos, 229
- Environmentally smart nitrogen
 - controlled release fertilizer in potato production, 759
- Environmental conditions
 - temperature and moisture on soil test P, 537
- Erosion
 - classification of Mollisols in Iowa, 413
 - freeze-thaw and soil erosion in northeast China, 567
 - root growth in eroded Mollisols, 521
 - simulated, fertilizer treatments on water-stable aggregates, 551
 - tillage erosion and crop yield, 665
- Fertilité chimique du sol
 - roches vertes de Gangila comme amendement des sols sableux, 787
- Fertility
 - vertical and lateral transport of bromide, 609
- Fertilization, long term
 - fertilization effects on C and N, 509
 - fertilization effects on soil water, 439
- Fertilizer
 - fertilizer effect on water use efficiency of spring wheat, 573
 - forty-nine years of fertilization on soil carbon, 835
 - long-term agronomic effects on soil C, 449
 - measurement of nitrate movement using bromide and ^{15}N , 631
 - trembling aspen growth on reclamation soils, 143
- Fertilizer and cattle manure
 - root growth in eroded Mollisols, 521
- Fertilizer N
 - changes of residual soil N in Chernozems, 481
- Field bioassay
 - soybean insecticides and earthworm toxicity, 751
- Fire
 - organic layer depth in forests, 799
- First-order equation
 - soils used in oil sands reclamation, 131
- Forage crops
 - modelling SOC dynamics in forage-based crop rotations, 821
- Forest
 - aspen and white spruce growth on saline soils, 213
 - organic layer depth in forests, 799
 - reforestation, reclamation of oil and gas well sites, 165
- Forest, boreal
 - aspen and white spruce growth on saline soils, 213
 - phenolic profiles in natural and reconstructed soils, 153
 - trembling aspen growth on reclamation soils, 143
- Fractal dimension
 - cut slope revegetation, 277
- Freezing and thawing
 - freeze-thaw and soil erosion in northeast China, 567
 - moisture and freeze/thaw on aggregate size, 529
- Fungal community
 - microbial biogeographic distribution in Black soils, 543
- Geometric mean diameter
 - cattle manure on soil aggregate size and nutrients, 673
- Goniometer
 - effect of soil surface characters on soil BRF, 297
- Grassland
 - grazing exclusion effects on C sequestration, 807
- Grazing management
 - grazing exclusion effects on C sequestration, 807
 - long-term grazing effects on soil properties, 685
- Gully erosion
 - freeze-thaw and soil erosion in northeast China, 567
- Gypsum
 - P availability from treated poultry litter, 893
- Hay
 - long-term agronomic effects on soil C, 449
- Hood infiltrometers
 - macropore flow in Black soils, 559
- Horqin Sandy Grassland
 - grazing exclusion effects on C sequestration, 807
- Human-made soil
 - Anthroposolic Order, 7
- Humic acid
 - soil organic matter in typical Chernozem of Ukraine, 429
- Hummocky landscape
 - soil water in the Prairie Pothole Region, 649
- HYDRUS 1-D
 - chloride leaching in two Ontario soils, 285
- Insecticide
 - organophosphate, pyrethroid, soybean insecticides and earthworm toxicity, 751
- Introductory Carbon Balance Model
 - concept
 - modelling SOC dynamics in forage-based crop rotations, 821
- Invertase
 - water stress and rhizosphere functions in corn, 501
- Ionic resin analysis
 - soils used in oil sands reclamation, 131
- Irradiance levels
 - chlorophyll assessment in crop species, 645
- Land management
 - soil cover changes on the Canadian prairies, 471

- Land reclamation
soil inventory for brownfield reclamation, 191
trembling aspen growth on reclamation soils, 143
- Landscape
measurement of nitrate movement using bromide and ^{15}N , 631
soil water in the Prairie Pothole Region, 649
vertical and lateral transport of bromide, 609
- Larch
organic layer depth in forests, 799
- Leaching
chloride leaching in two Ontario soils, 285
- Least limiting water range
reclamation of oil and gas well sites, 165
- Legislation
Alberta conservation and reclamation regulatory history, 39
- Legume
papermill biosolids and alkaline residuals, 917
- Legume green manure
long-term agronomic effects on soil C, 449
- Lignin monomers
phenolic profiles in natural and reconstructed soils, 153
- Lime
papermill biosolids and alkaline residuals, 917
phosphorus availability from treated poultry litter, 893
- Liquid limit
comparison of methods to calculate liquid limit for clay, 859
- Long-term fertilization
fertilization effects on C and N, 509
fertilization effects on soil water, 439
- Lotus corniculatus*
influence of root growth on soil development, 67
- Macropore
macropore flow in Black soils, 559
- Maize
chemical and biological properties in a Chinese Mollisol, 419
water stress and rhizosphere functions in corn, 501
- Manure
composted manure lowers denitrification N loss, 865
chemical and biological properties in a Chinese Mollisol, 419
fall application, non-growing season N_2O fluxes, 315
farmyard, agronomic productivity and quality of a vertisol, 771
fertilizer and cattle manure, 521
fertilizer treatments on water-stable aggregates, 551
liquid swine manure, 315
long-term agronomic effects on soil C, 449
non-growing season N_2O fluxes, 315
root growth in eroded Mollisols, 521
- Manure N
changes of residual soil N in Chernozems, 481
- Metabolic quotient
soils used in oil sands reclamation, 131
- Metal
bioenergy crop production on tailings, 203
extractants to assess metal phytoavailability, 253
reclamation of copper mine tailings, 89
- Microbial biomass carbon
chemical and biological properties in a Chinese Mollisol, 419
- Microbial respiration and carbonates
contributions of carbonates to soil CO_2 emissions, 599
- Microbiology
retention and nitrification of injected ammonia, 589
- Microlysimeter
soils used in oil sands reclamation, 131
- Micromorphology
reclamation of mine water deposits, 243
- Microtox
screening bioassay for soil PHC toxicity, 901
- Midwestern United States
agriculture's effects on the classification of black soils, 403
- Mine, diamond
diamond mine reclamation in the Canadian North, 77
- Mine reclamation
reclamation of copper mine tailings, 89
- Mollisol
agriculture's effects on the classification of Black soils, 403
changes of residual soil in Chernozems, 481
chemical and biological properties of a Chinese Mollisol, 419
classification of Mollisols in Iowa, 413
fertilization effects on C and N, 509
fertilization effects on soil water, 439
fertilizer treatments on water-stable aggregates, 551
freeze-thaw and soil erosion in northeast China, 567
long-term agronomic effect on soil C, 449
macropore flow in Black soils, 559
microbial biogeographic distribution in Black soil, 543
moisture and freeze/thaw on aggregate size, 529
nitrate-N loss from corn production systems, 493
overview of Mollisols in the world, 383
root growth in eroded Mollisols, 521
soil cover changes on the Canadian prairies, 471
soil organic matter in typical Chernozem of Ukraine, 429
temperature and moisture on soil test P, 537
tillage and rotation effects on crop yield, 463
water stress and rhizosphere functions in corn, 501
- Monolith
influence of root growth on soil development, 67
- Naphthenic acid
transport and retardation in peat, 723
- Native species
diamond mine reclamation in the Canadian north, 77
- Natural gas wellsites
natural gas wellsite reclamation, 883

- Nitrate
 controlled release fertilizer in
 potato production, 759
 measurement of nitrate movement
 using bromide and ^{15}N , 631
 nitrate-N loss from corn
 production systems, 493
 N and corn profits with fall cover
 crops, 353
 retention and nitrification of
 injected ammonia, 589
- Nitrification
 retention and nitrification of
 injected ammonia, 589
- Nitrogen
 cattle manure on soil aggregate
 size and nutrients, 673
 composted manure lowers
 denitrification N loss, 865
 fertilization effects on C and N,
 509
- Nitrogen application rate
 nitrate-N loss from corn
 production systems, 493
- Nitrogen budget, Canadian
 agricultural
 changes of residual soil N in
 Chernozems, 481
- Nitrogen derived from fertilizer
 measurement of nitrate movement
 using bromide and ^{15}N , 631
- Nitrogen, environmentally smart
 controlled release fertilizer in
 potato production, 759
- Nitrogen fertilizer
 urea fertilizers in grain corn, 341
- Nitrogen fixation
 biochar enhances seedling growth,
 329
 changes of residual soil N in
 Chernozems, 481
- Nitrogen rates
 chlorophyll assessment in crop
 species, 645
- Nitrogen Nutrition Index
 controlled release fertilizer in
 potato production, 759
- Nitrous oxide
 composted manure lowers
 denitrification N loss, 865
 non-growing season N_2O fluxes,
 315
- No-tillage
 tillage and rotation effects on crop
 yield, 463
- Non-growing season
 non-growing season N_2O fluxes,
 315
- Nuclear magnetic resonance
 phenolic profiles in natural and
 reconstructed soils, 153
- Numerical modelling
 unsaturated flow modelling for oil
 sands reclamation, 103
- Nutrient
 reclamation of copper mine
 tailings, 89
 subsoiling and pellet injection on
 soil quality, 269
- Nutrient uptake
 extractants to assess metal
 phytoavailability, 253
 root growth in eroded Mollisols,
 521
- Nutrition, plant
 trembling aspen growth on
 reclamation soils, 143
- Oat
 N and corn profits with fall cover
 crops, 353
- Oil
 screening bioassay for soil PHC
 toxicity, 901
- Oil sands
 Alberta conservation and
 reclamation regulatory history,
 39
 phenolic profiles in natural and
 reconstructed soils, 153
 soil water regimes of reclaimed
 upland slopes, 117
- Oil sands process-affected water
 transport and retardation in peat,
 723
- Oilseed radish
 N and corn profits with fall cover
 crops, 353
- Ontario
 chloride leaching in two Ontario
 soils, 285
- Organic acid
 reclamation of asbestos, 229
- Organic acid excretion
 water stress and rhizosphere
 functions in corn, 501
- Organic amendment
 natural gas wellsite reclamation,
 883
 organic amendments in soil
 reclamation, 19
 response of N mineralization and
 denitrification to water, 695
- Organic material, monomorphic
 reclamation of mine water
 deposits, 243
- Organic matter
 organic amendments in soil
 reclamation, 19
 phenolic profiles in natural and
 reconstructed soils, 153
 soil organic matter in typical
 Chernozem of Ukraine,
 429
- Organic pellet
 subsoiling and pellet injection on
 soil quality, 269
- Organization for Economic
 Cooperation and Development
 bioassay
 soybean insecticides and
 earthworm toxicity, 751
- Organophosphate insecticide
 soybean insecticides and
 earthworm toxicity, 751
- Papermill biosolids
 papermill biosolids and alkaline
 residuals, 917
- Particle size distribution
 cut slope revegetation, 277
- Particle size fraction
 fertilization effects on C and
 N, 509
 forty-nine years of fertilization on
 soil carbon, 835
- Peat
 organic layer depth in forests,
 799
 transport and retardation in peat,
 723
- Peat-mineral mix
 soil water regimes of reclaimed
 upland slopes, 117
 trembling aspen growth on
 reclamation soils, 143
- Pedofeature
 reclamation of mine water
 deposits, 243
- Petiole nitrate concentration
 controlled release fertilizer in
 potato production, 759
- pH
 papermill biosolids and alkaline
 residuals, 917
- Phosphatase
 water stress and rhizosphere
 functions in corn, 501
- Phospholipid fatty acid
 soils used in oil sands reclamation,
 131
- Phosphorus
 forms of compost phosphorus,
 711

- phosphorus availability from treated poultry litter, 893
- Phosphorus test
temperature and moisture on soil test P, 537
- Phytoavailability
extractants to assess metal phytoavailability, 253
- Pinus contorta*
biochar enhances seedling growth, 329
- Plant community
grazing exclusion effects on C sequestration, 807
- Porosity, dual
transport and retardation in peat, 723
- Polymer-coated urea
controlled release fertilizer in potato production, 759
- Poultry litter
P availability from treated poultry litter, 893
- Prairie, Canadian, semiarid
climate trends in southwestern Saskatchewan, 803
soil cover changes on the Canadian prairies, 471
- Prairie Pothole Region
soil water in the Prairie Pothole Region, 649
- Precipitation use efficiency
fertilizer effect on water use efficiency of spring wheat, 573
- Productivité des sols
influence des agrominéraux sur la production du soja, 905
- Profitability
tillage and rotation effects on crop yield, 463
- Protease
water stress and rhizosphere functions in corn, 501
- Pyrethroid insecticide
soybean insecticides and earth worm toxicity, 751
- Pyrite
reclamation of lignite mining areas, 53
- Rate constant
soils used in oil sands reclamation, 131
- Reclamation
Alberta conservation and reclamation regulatory history, 39
- Anthroposolic Order, 7
aspen and white spruce growth on saline soils, 213
bioenergy crop production on tailings, 203
diamond mine reclamation in the Canadian north, 77
extractants to assess metal phytoavailability, 253
influence of root growth on soil development, 67
natural gas wellsite reclamation, 883
organic amendments in soil reclamation, 19
phenolic profiles in natural and reconstructed soils, 153
reclamation of asbestos, 229
reclamation of copper mine tailings, 89
reclamation of lignite mining areas, 53
reclamation of mine waste deposits, 243
reclamation of oil and gas well sites, 165
soil and vegetation recovery after a well blowout, 179
soil inventory for brownfield reclamation, 191
soils used in oil sand reclamation, 131
soil water regimes of reclaimed upland slopes, 117
subsoiling and pellet injection on soil quality, 269
trembling aspen growth on reclamation soils, 143
unsaturated flow modelling for oil sands reclamation, 103
- Reconstructed soil
Anthroposolic Order, 7
- Recultivation
reclamation of lignite mining areas, 53
- Reflectance
comparison of soil water estimation methods, 845
effect of soil surface characters on soil BRF, 297
- Reflectance factor, bidirectional
effect of soil surface characters on soil BRF, 297
- Reforestation
reclamation of oil and gas well sites, 165
- Regulation
Alberta conservation and reclamation regulatory history, 39
- Remediation
screening bioassay for soil PHC toxicity, 901
- Remote sensing
effect of soil surface characters on soil BRF, 297
- Réserves hydriques
effet de la pluviométrie sur les réserves hydriques des sols, 367
- Resin analysis, ionic
soils used in oil sands reclamation, 131
- Restoration, site
grazing exclusion effects on C sequestration, 807
- Revegetation
diamond mine reclamation in the Canadian North, 77
unsaturated flow modelling for oil sands reclamation, 103
- Roches vertes de Gangila
roches vertes de Gangila comme amendement des sols sabieux, 787
- Root
adventitious roots, 799
organic layer depth in forests, 799
modelling SOC dynamics in forage-based crop rotations, 821
- Root biomass
long-term grazing effects on soil properties, 685
- Root sampling
influence of root growth on soil development, 67
- Rotation
tillage and rotation effects on crop yield, 463
- Roundup ready
soil nutrient, C and N isotope levels, 841
- Rye (cereal)
N and corn profits with fall cover crops, 353
- Salinity
aspen and white spruce growth on saline soils, 213
soil and vegetation recovery after a well blowout, 179
- Season of grazing
long-term grazing effects on soil properties, 685

- Semiarid Canadian prairie
 - climate trends in southwestern Saskatchewan, 803
- Semiarid tropics
 - agronomic productivity and quality of a vertisol, 771
- Semivariogramme
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Shannon index (H') of bacterial diversity
 - retention and nitrification of injected ammonia, 589
- Sieving, dry
 - cattle manure on soil aggregate size and nutrients, 673
- Simulated soil erosion
 - fertilizer treatments on water-stable aggregates, 551
- Single extraction
 - extractants to assess metal phytoavailability, 253
- Site restoration
 - grazing exclusion effects on C sequestration, 807
- Slope gradient
 - tillage erosion and crop yield, 665
- Slope position
 - tillage erosion and crop yield, 665
- Sodium
 - transport and retardation in peat, 723
- Sodium adsorption ratio
 - soil and vegetation recovery after a well blowout, 179
- Soil inventory
 - soil inventory for brownfield reclamation, 191
- Soil phosphorus test
 - temperature and moisture on soil test P, 537
- Soil survey
 - classification of Mollisols in Iowa, 413
- Soil development
 - influence of root growth on soil development, 67
- Soja
 - influence des agrominéraux sur la production du soja, 905
- Sol sableux
 - influence des agrominéraux sur la production du soja, 905
- Solute movement
 - measurement of nitrate movement using bromide and ^{15}N , 631
- Sorption
 - transport and retardation in peat, 723
- Soybean
 - tillage and rotation effects on crop yield, 463
- Species diversity
 - soil and vegetation recovery after a well blowout, 179
- Spruce, black
 - organic layer depth in forests, 799
- Stem analysis
 - aspen and white spruce growth on saline soils, 213
- Stepwise multiple linear regression
 - comparison of soil water estimation methods, 845
- Stocking rate
 - long-term grazing effects on soil properties, 685
- Structure
 - cut slope revegetation, 277
- Structure spatiale
 - cartographie de la capacité maximale de sorption du P des sols, 733
- Stress, drought
 - water stress and rhizosphere functions in corn, 501
- Subsoiling
 - subsoiling and pellet injection on soil quality, 269
- Subsurface drainage
 - nitrate-N loss from corn production systems, 493
- Summer fallow
 - fertilizer effect on water use efficiency of spring wheat, 573
- Surface properties
 - reclamation of asbestos, 229
- Sustainability
 - overview of Mollisols in the world, 383
- Sustainable yield index
 - agronomic productivity and quality of a vertisol, 771
- Swine manure, liquid
 - non-growing season N_2O fluxes, 315
- Synthetic soil
 - cut slope revegetation, 277
- Tailings
 - bioenergy crop production on tailings, 203
- Tamarack
 - organic layer depth in forests, 799
- Taxonomy
 - agriculture's effects on the classification of black soils, 403
 - classification of Mollisols in Iowa, 413
- Temperature
 - temperature and moisture on soil test P, 537
- Thaw
 - non-growing season N_2O fluxes, 315
- Tillage
 - soil organic matter in typical Chernozem of Ukraine, 429
 - tillage and rotation effects on crop yield, 463
 - tillage erosion and crop yield, 665
- Tillage, conventional
 - macropore flow in Black soils, 559
- Tillage systems
 - overview of Mollisols in the world, 383
- Time of day
 - chlorophyll assessment in crop species, 645
- Tissue, plant
 - reclamation of copper mine tailings, 89
- Topographical position
 - soil water regimes of reclaimed upland slopes, 117
- Topsoil
 - natural gas wellsite reclamation, 883
- Trace metal, potentially toxic
 - reclamation of copper mine tailings, 89
- Transgenic canola
 - soil nutrient, C and N isotope levels, 841
- Triticum aestivum* L. (see Wheat)
- Tropics, semiarid
 - agronomic productivity and quality of a vertisol, 771
- Tunisie
 - effet de la pluviométrie sur les réserves hydriques des sols, 367

- United States, Midwestern agriculture's effects on the classification of Black soils, 403
- Unsaturated flow
 - unsaturated flow modelling for oil sands reclamation, 103
- Urban soil
 - soil inventory for brownfield reclamation, 191
- Urea
 - urea fertilizers in grain corn, 341
 - polymer coated, controlled release fertilizer in potato production, 759
- Urease activity
 - chemical and biological properties in a Chinese Mollisol, 419
- Vegetation recovery
 - soil and vegetation recovery after a well blowout, 179
- Volumetric water content
 - soil water regimes of reclaimed upland slopes, 117
- Water deficit
 - fertilization effects on soil water, 439
- Water-filled pore space
 - composted manure lowers denitrification N loss, 865
 - response of N mineralization and denitrification to water, 695
- Water, soil
 - comparison of soil water estimation methods, 845
 - fertilization effects on soil water, 439
 - response of N mineralization and denitrification to water, 695
 - soil water in the Prairie Pothole Region, 649
 - soil water regimes of reclaimed upland slopes, 117
- Water-stable aggregate
 - fertilizer treatments on water-stable aggregates, 551
- Water use efficiency
 - fertilizer effect on water use efficiency of spring wheat, 573
- Wavelength
 - comparison of soil water estimation methods, 845
- Well site remediation
 - natural gas wellsite reclamation, 883
 - soil and vegetation recovery after a well blowout, 179
- Wheat
 - fertilizer effect on water use efficiency of spring wheat, 573
 - long-term agronomic effects on soil C, 449
- Wind erodible fraction
 - cattle manure on soil aggregate size and nutrients, 673
- Wood ash
 - papermill biosolids and alkaline residuals, 917
- Zea mays* L. (see Corn)

